REMARKS

Claims 6-19 are pending in the application. Claim 13 is being canceled. Claims 6, 12 and 14 are being amended. New claim 20 is being added. The language of new claim 20 is based on paragraph [45] as published.

Rebuttal Arguments

The Examiner alleges that the term 'modules hierarchy' is not clear. The hierarchy of modules is described with reference to Fig 3A and Fig. 3B and in relation to hierarchy of directories and files. It is noted that hierarchy of modules in the carousel of objects may not correspond to the hierarchy of directories and files conveyed in the modules.

Support for this can be found in the section of the specification which reads:

> *For example, if a receiver needs to retrieve the object "File" located in path "D1/D2/File", it must check first in which module the object "D1" is broadcasted, next retrieve the object "D1", read in which module the object "D2" is broadcasted, possibly retrieve this module, and subsequently read from the object "D2", in which module the object "File" is broadcasted. In the simplest case, all three objects can be in one module and then it is enough to retrieve only this single module. In the most complicated case, which is illustrated in Fig. 3B, each of these objects is in a different module.*

Moreover, the Examiner alleges that it is not clear whether 'modules hierarchy' is in reference to a directory module of Stalker. The Applicants clarify that the directory module of Stalker is a BFS directory which includes the module names for all of the other modules on this or any other data carousel. Therefore, the directory module is a top-level module of modules in a given carousel of objects. Hence a top-level of the modules hierarchy.

Additionally, all issues regarding clarity have to be considered when taking into account the prior art available for one skilled in the art and in the present case the prior art is the MPEG-2 standard mentioned in the specification as filed.

Moreover, Stalker also mentions:

> "*...The underlying mechanism for transporting data across the network* ***16*** *relies on a broadcast data carousel that is defined in the MPEG-2 DSM-CC specification (i.e., ISC/IEC 13818-6). Typically, broadcast data is grouped into files that are subdivided into fixed-size data blocks and then broadcast in a non-sequential order using the data carousel mechanism. However, BFS* ***10*** *of the present invention provides a layer on top of the broadcast data carousel that hides the details of this underlying transport mechanism from the server* ***12*** *and clients* ***14****. Within a data carousel, individual data files are called modules. Since modules are identified by numbers (not names), BFS* ***10*** *creates a mapping between file numbers and module names. In this way, the server* ***12*** *and clients* ***14*** *of BFS* ***10*** *view these modules in a standard hierarchical file system similar to files found on a disk operating system...*".

However, what Stalker proposes is an additional layer or modification to the BFS, which is not compatible with the standard but allows for easier locating of modules of a data carousel. Stalker also confirms that hierarchy of modules in a data carousel is common knowledge.

Additionally, the Examiner is concerned that the claims do not prescribe retrieving data based on referring to a directory to determine whether a module exists. Applicant clarifies that according to the standard mentioned by the specification, all modules of a given carousel are broadcast with the same PID number; therefore, the retrieval of data from a carousel is not dependent on the directory module. The Examiner is respectfully directed to a passage from the specification which reads:

> *"...Data retrieving is performed continually by the time when the receiver finds that all data from the carousel broadcasted in the stream packets with a specific PID number were already retrieved. PID number is defined by application, which requires data reading from the carousel, broadcasted in the elementary stream packets with a specific PID number..."*

All outstanding requirements will now be addressed in the order they appear in the Office Action mailed May 23, 2008.

Specification

4. The specification stand objected to as failing to provide proper antecedent basis for the claimed subject matter of claim 13, namely, terms "a computer-readable memory", "a processor" and "a computer program" are not included in the specification.

Applicant has canceled claim 13 to obviate the Examiner's objection.

Claims Rejections - 35 USC §112

5-6. Claims 6-19 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with written description requirement and stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as invention.

Applicant has amended claims 6 and 14 to obviate the Examiner's rejection.

Claims Rejections - 35 USC §102 and 35 USC §103

7-17. Claims 6, 7, 9-15 and 17-19 stand rejected under 35 U.S.C. 102(a) as being anticipated by Stalker, US Patent Publication No. 2002/0091816, whereas claims 8 and 16

stand rejected under 35 U.S.C. 103(a) as being unpatentable over Stalker, US Patent Publication No. 2002/0091816 in view of Chari US Patent No. 6,038319.

Applicant respectfully disagrees. The Examiner is of the opinion that Stalker discloses retrieval regardless of the modules hierarchy in the carousel but is dependent on the parameters associated with the data. Applicant points out that the claims do not recite any parameters associated with data and also require that all data from a carousel are retrieved. This is what Stalker teaches away from by using the parameters associated with data, which in turn results in discarding modules buffered:

> *"...For instance, an application may be interested in a module contained in blocks **2** to **6**. If it starts reading as block **4** is broadcast, data block processor **48** copies the data in block **4** to the application's buffer and then reads the data in each successive block that is broadcast. Subsequent data blocks associated with the requested module (i.e., blocks **5**, **6**, **2**, and **3**) are copied to the application's buffer, whereas data that is not part of the module (i.e., blocks **7**, **8**, **9**, **10** and **1**) are discarded. ..."*

Fig. 2 of the present invention defines that data are retrieved from a carousel without any prior identification of modules. All data of modules are retrieved prior to creation of modules. Support for this can be found in the following passage from the specification:

> *"...Next it is checked if all data sections 205, broadcasted in the carousel of objects with the use of protocol DSM-CC, were already retrieved. If not, the procedure returns to point 202. In opposite case, modules will be created from the retrieved data 206...".*

Moreover, according to Fig. 4, it is defined that *"...According to the invention, the modules are retrieved from the stream one by one, as they are broadcasted. Immediately after connecting to the data stream, modules are retrieved by the time when all the modules are retrieved. The whole operation occurs in the time marked as 410. Only later they are*

analyzed..." This proves that hierarchy of modules is not analyzed and retrieval is executed continuously for all data on as-they-arrive basis. The support for this can be found in paragraph 28 of the specification as filed.

If there was a situation presented with reference to Fig. 3B where each object is located in a different module, the hierarchy of modules would correspond to this of directories tree. Module 1 is a top-level module that points to module 2 being a first level module, which in turn points to a second level module 'module 3'. As mentioned in the specification "*...In the most complicated case, which is illustrated in Fig. 3B, each of these objects is in a different module. In order to check if the path is correct and the object "File" exists, all three modules must be retrieved from the data stream...*"

The main difference between the present invention and Stalker is that Stalker operates at the level of modules [P0023-P0024]. Modules are read, copied, discarded. It is a task of Stalker to connect to a carousel, obtain modules one-by-one in full and decide what steps to take after. The present invention in turn operates at the level of the whole carousel and reads all data of the carousel and only after all data have been retrieved and stored modules are obtained. The data retrieval and storage is continuous, i.e., there is no data discarding and pre-processing as disclosed in Stalker:

> *"..Data blocks not associated with any registered interest are discarded before any unnecessary processing occurs on the client. In this way, only data blocks associated with a registered interest undergo pre-processing in the data source processor* ***42*** *and are allowed to pass through to the dispatcher* ***30****..."*

Thus, the amended claim 14 puts emphasis on the features of continuous retrieval and storage and processing after all data, of a given carousel, have been retrieved and stored.

The new claim 20 also clarifies that continuous retrieval of data requires setting up a filter for passing all data related to the carousel of objects broadcasted within packets identified with a

specific PID number defined by application requesting data reading from the carousel of objects.

This ALL-CAROUSEL-DATA filter is what Stalker teaches away from by using a conventional method of:

> *"...Data blocks outside the desired range are discarded in block **114**..."*

> *"...Referring to FIG. 4, when an application **34** registers an interest, the interest manager **36** installs a filter in the corresponding data source processor **42**. A module identifier encapsulated in each data block is compared to each registered interest..."*

Therefore the invention achieves the effect of rapid retrieval of all modules and the effect of avoiding waiting for multiple cycles.

Therefore, Applicant believes that the claims as amended are not anticipated by Stalker.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. No authorization to charge deposit account is given and any prior outstanding authorizations are hereby rescinded. This response is filed timely within 3 months from the issuance of the final office action (Aug. 23, 2008 fell on a Saturday).

Respectfully Submitted,

Customer Number: **33,794**

/Matthias Scholl/

Dr. Matthias Scholl, Esq.
Reg. No. 54,947
Attorney of Record

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